ANALYTICS UPDATE:

The Art of the Chart





Arthur Coyne, CFA Senior Research Analyst

Senior Research Analyst Arthur Coyne, CFA, is masterful at helping investors to understand and visualize the big-picture impacts that affect the market. In his quarterly charts, he illustrates the key events and narratives that shape the investment landscape. How does he approach chartmaking — what is the art of the chart?

Arnerich Massena's Investment Committee develops the firm's quarterly commentary to help our clients understand the overarching narratives driving the market environment each quarter, which provides important context as advisors discuss the details of each portfolio. But how to illustrate this big-picture narrative comes down to showing key data and events in a handful of charts. Senior Research Analyst Arthur Coyne, CFA, has honed this art to perfection.

How do you begin the process each quarter?

Modern Portfolio Theory, which underlies asset allocation decisions, has a lot of heavy math behind it, and it's easy to get lost in the equations. And human tendency is to look at the details. But asset allocation and portfolio

management are really all about seeing the forest more than the trees. So I think about my job as being to show the forest.

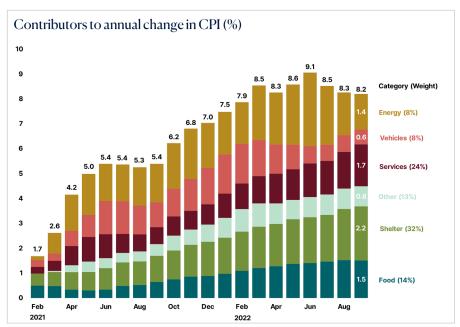
Einstein is quoted as saying, "If I had an hour to solve a problem, I'd spend 55 minutes thinking about the problem and five minutes thinking about solutions." What we are really trying to do is answer investors' questions, so we have to start by identifying the right questions. What is the biggest thing investors want to know each quarter? Is it whether markets will go up or down? Is it whether to buy stocks or bonds? Or, like this past quarter, is it whether inflation will continue? (See below for one of this quarter's charts.)

Once we have pinpointed the question or questions, I can begin thinking about the best ways to answer those questions, whether it be by showing historical relationships, illustrating comparisons, or other measures. The goal is to bring the reader to an exciting "a-ha!" moment.

What makes a great chart?

We want readers to be able to more or less instantly understand the message of the chart, so it's all about making it as easy as possible. If you have to struggle to understand the chart, we haven't done a good job.

So, the first thing is to make your chart clean; we avoid cluttering our charts with unnecessary gridlines and tick marks and use labels right next to the data instead of legends. Then I make liberal use of labels, arrows, and callouts to highlight important information. I think it's also important to stay away from jargon and acronyms and spell out what we want to make sure people understand. Lastly, I make sure the disclosures are easy to find and read to address any detailed questions people might have about the information.



Source: BLS Consumer Price Index report (Table 7). Category weights are based on August 2022 relative importance.

In September, the U.S. Consumer Price Index was 8.2% higher than a year ago. Prices for services and shelter continued to rise, but were offset by declining energy prices.



ANALYTICS NEWS: The Art of the Chart

How do you support the chart with commentary?

Most people learn and understand through storytelling or narrative. For example, the story of the three little pigs teaches us about protecting against risk. Understanding markets is no different; the best way to understand is by seeing the whole narrative. A chart, taken alone, just shows information in a visual format. Charts illustrate trends and data relationships, but they don't usually tell the narrative, so we include short commentary to fill in more of the story.

When writing the commentary, as when developing the chart, clarity is critical. The commentary helps readers understand the narrative behind the chart and provides the context to make the chart data meaningful.

How did you become a master of the art of the chart?

I've been creating asset allocation studies for more than 25 years, but rarely was I the individual presenting the study to clients. Because advisors all have different approaches and styles, it was important to provide information that would be self-explanatory to both advisors and clients. I learned how to show the important elements first and structure information so that readers can focus on what matters.

Some people like to ski, some people play sports; I like to make charts. Fortunately, I think writing well and creating informative charts is an art everyone can appreciate. Everyone likes to eat, but not everyone is a master chef!



